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ABSTRACT OF THE DISCLOSURE

A method and apparatus for performing load-based packet marking within a network is described. In one aspect, a first group of one or more packets of a data flow are marked with a first behavioral treatment value that directs devices within the network to treat the first group of one or more packets with a first quality of service treatment.

The bandwidth that is currently being achieved for the flow within the network is determined based on data traffic within the network. Based on the achieved flow bandwidth within the network a second behavioral treatment value is then determined. Thereafter, a second group of one or more packets of the data flow is marked with a second behavioral treatment value that directs devices within the network to treat the second group of one or more packets with a second quality of service treatment. The process of dynamically marking the packets for a particular data flow may be performed multiple times.